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Hab.—Mexico. (Coll. Entom. Society.)

A very beautiful species, closely allied to the *Xenarchus* of Hewitson, but from which its differences, as indicated in the diagnosis, are invariably persistent.

July 3d.

The President, Dr. Hays, in the Chair.

Twenty-nine members present.

The Chairman made some remarks on Trichina spiralis, and exhibited a portion of human flesh infected with the parasite taken from one of five persons who recently died of Trichiniasis in Iowa.

July 10th.

Mr. Cassin, Vice-President, in the Chair.

Thirteen members present.

July 17th.

The President, Dr. Hays, in the Chair.

Nine members present.

July 24th.

Mr. Vaux, Vice-President, in the Chair.

Fifteen members present.

Prof. Cope remarked that he had made a few observations on some of the extinct vertebrates of the Mesozoic Red Sandstone, during an examination of the specimens preserved in the collection of Charles M. Wheatley, A. M., at Phœnixville, Pa.

Rhytidodon carolinensis (Emmons, usually misspelled *Rutiodon*) appears to be, so far as extant remains are conclusive, a species of Belodon, Von Meyer, allied to B. plieningeri. One confirmation, the identity of dentition of the Würtembergian and Pennsylvanian species, had been pointed out to him by C. M. Wheatley. The posterior teeth are lenticular in section, nearly broad as high, crenate on both edges; the anterior cylindrical, slender and coarsely fluted; the first represent *Eurydorus serridens*, Leidy, Pr. A. N. S., Phila., 1859, 110, and the latter Rhytidodon Emmons.*

Clepsisaurus pennnsylvanicus Lea, whose affinities have never been indicated, apparently belongs to the same great type as the preceding: while its teeth are without pulp-cavity, as pointed out by Leidy, those of the fangs of Belodon are very small.

He was also enabled to announce the discovery of the first undoubted Labyrinthodon of these beds. The species, which is of considerable size, is represented by portions of two crania and numerous teeth. It is apparently nearest Mastodonsaurus (Labyrinthodon) diagnosticus Von Meyer, in the proportions of the cranial segments and sculpture.

The largest fragment is eight inches long and eight and one-half wide, and is a portion of the table of the cranium exhibiting the usual medial depression, and embracing portions of the postorbital and parietal bones; one of the former is four in. six l. long; both are pitted medially (about 3½ pits in an inch) and marked with short coarse sulci posteriorly. The parietals are 2 in. 9 l. wide behind, and four inches wide between the anterior parts of the postorbitals. On what is probably the posterior part of the interorbital region (a small part of the posterior margin of the left orbit is preserved) commence two smooth shallow sulci 1 in. 2 l. apart, which are probably the posterior extremities of the superficial channels of the face of the Labyrinthodonts. Between them the surface is pitted, (4 or 5 to the inch.) The parietal bones are throughout longitudinally sulcate, (four and one-half to the inch), with obtuse ridges between. The parietal fontanelle was not discoverable, nor could the form of the orbits be certainly determined, though they were probably not large.

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* Prof. Owen (Palæontology) states that Cladyodon *Ow.* was applied to the same genus as, and is older than the name Belodon.

The teeth are of various sizes, sometimes two inches long, and more slender in proportion to the length than those of the Mastodonsaurus jaegeri and salamandroides; they are cylindrical, gently curved and acuminate, without external sulci; of the minuter sculpture nothing could be said, as Prof. C. had only examined the casts of the surface. In a few weathered sections the involuted folds of the enamel are well displayed. They are not convolute as in typical Labyrinthodonts, but perfectly straight and convergent to a minute central vacuity. In a tooth four lines in diameter there appear to be five principal radii which attain the centre, about twenty which nearly approach it, and thirty two shorter, none of which measure less than a half radius. These radii, though exceedingly delicate, may sometimes be seen in longitudinally fractured specimens. The roots exhibit a short conic pulp cavity.

Having observed traces of similar radii in a small fluted tooth having an oval section, much resembling some of those of Belodon (*Rhytidodon*), but perhaps Compsosaurus Leidy, it had occurred to the speaker whether these radii had any connection with the mineral constitution of the teeth. These were all of black dolomite, the weathered portions, between the radii, white. Radii and straight veins of other material were pointed out in some specimens in his collection by Wheatley, as iron and copper pyrites aud silica, but these were either eccentric or irregular. Inquiry is therefore suggested respecting the existence of the labyrinthic structure in any of the above genera before described. The form and sculpture assigned to Centemodon Lea render comparison with the new species unnecessary.

The latter may be named MASTODONSAURUS DURUS. The cranial bones on which it is founded occurred in bed No. 15, a hard black shale, of Wheatley's section in Silliman's Journal Sci. Arts, 1861, 45, about 89 feet from the bottom of the series, while the tooth last described is from near 40 feet lower down, in Nos. 21 or 22. The Belodon comes from about 35 feet below the last.

Geologists have inclined to indentify these beds with the upper Trias or lower Jurassic. The identification of the Belodon and Mastodonsaurus points most strongly to the age being that of the Keuper or upper division of Trias.

July 31*st*.

DR. BRIDGES in the Chair.

Fourteen members present.

The following gentlemen were elected Members of the Academy: Prof. A. Stillé, Dr. Geo. H. Horn, Mr. J. G. Moore, Dr. A. Nebinger, Mr. C. G. Ogden, and Mr. Samuel L. Shober; and Mr. F. Cowan, of Washington, was elected a Correspondent.

On Report of the Committee the following was ordered to be published: